Exhibit "A"

ENGINEER'S REPORT

of the

LEONIDES ROSARIO INCIDENT

Prepared by:

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LEONIDES ROSARIO INCIDENT

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A. INTRODUCTION

On February 15, 2001 Mr. Leonides Rosario, Lancaster, PA, was injured while performing his duties for his employer, Meridian Products, Inc., New Holland, PA. At the time of this incident Mr. Rosario was operating a SCM Model T120 L'Invincibile Shaper.

This investigation was performed to determine if the SCM Model T120 L'Invincibile Shaper (the shaper) was defective in a manner that was a cause of Mr. Rosario's injury.

B. INFORMATION AVAILABLE FOR REVIEW

- 1. The Complaint.
- 2. Plaintiff's Request for Admission directed to Defendant SCM Group SpA.
- 3. Plaintiff's Interrogatories addressed to defendant SCM Group SpA.
- 4. "Instructions for Use", T120c, SCMI Woodworking Machinery Co.
- 5. "Spare Parts", T120c, SCMI.
- 6. Various maintenance records from Meridian Products for the subject shaper.
- 7. Deposition transcript of Leonides Rosario taken January 15, 2003.
- 8. Deposition transcript of Timothy Howe taken January 16, 2003.
- 9. Deposition transcript of Dean Youndt taken January 16, 2003.
- 10. Deposition transcript of Mark Sitz taken January 17, 2003.
- 11. Deposition transcript of Giordano Checchi taken March 6, 2003.
- 12. Deposition transcript of Rooplall Lachhman taken March 6, 2003.
- 13. Deposition transcript of Paul G. Krutz taken March 6, 2003.
- 14. Deposition transcript of Mool Sankar taken March 6, 2003.
- 15. Notes of interview with Mr. Rosario taken May 6, 2002.
- 16. My inspections at Meridian Products on May 2, 2002 and February 10, 2003.

C. BACKGROUND OF THE INCIDENT

The subject shaper was manufactured by SCM Group, SpA., in Rimini, Italy. The shaper was sold in the U.S.A. through one of SCM's channels of distribution. Since about 1970 the distributors have been Rockwell International, SCMI Woodworking Machinery Co., and (currently) SCM Group, USA. Meridian Products, Inc. is not the original purchaser of the shaper, but the shaper was one of several pieces of equipment transferred when Meridian bought the facility from a previous owner. Meridian Products, Inc. is now known as NESCO Enterprises, and has been since about November, 2000. The name Meridian Products is used throughout this report.

The subject shaper is a very versatile piece of woodworking machinery and is often used to cut various profiles on the edges of straight and shaped pieces of cabinet door moldings. At Meridian Products the subject shaper is used in this manner.

While edge-shaping of straight sections can be accomplished using a fence and guarding system, edge-shaping of non-straight pieces is done using a precut template. The piece to be cut is attached to the template and jointly fed into the shaper blades in a freehand manner. There are various styles of over-the-cutter guards known for use in freehand shaping. There was no guard over the cutters on the shaper at the time of Mr. Rosario's incident.

At the time of this incident Mr. Rosario was a new hire at Meridian Products, having started work nine days earlier, on February 6, 2001. Mr. Rosario speaks Spanish and speaks and understands little or no English. He was assigned to work with a Spanish-speaking co-worker for his on-the-job training for the operation of the subject shaper. Mr. Rosario was not given an operator's manual for the subject shaper.

D. DESCRIPTION OF THE INCIDENT

At the time of this incident Mr. Rosario was using the subject shaper to cut the profile of the top rails for cabinet doors. He was performing this operation freehand. Mr. Rosario had completed about 9 pieces, the extent of the order, and was in the process of turning off the machine. The ON/OFF switch was located around the left side of the shaper. Mr. Rosario rested his right hand on the shaper's table top for support while reaching for the OFF button at the side of the machine with his left hand. As he did so, his body and/or his right hand slipped and his right hand entered the path of the still rotating cutter blades. Mr. Rosario's right index finger was amputated and at least two other fingers were cut.

E. INSPECTION

I inspected the subject shaper at the Meridian Products facility in New Holland, PA on May 2, 2002, and again on February 10, 2003. Photo #1 shows the front of the subject shaper. The shaper is in the same location as it was at the time of Mr. Rosario's incident. Shown at the far left are door parts that have been through the shaper operation. Stored at the left and right of the shaper are templates for the various operations that are performed on work at Meridian Products. Also shown in Photo #1 is an ON/OFF control on the upper right front face of the shaper. This control was added after Mr. Rosario's injury.

Photo #2 shows the front access door on the shaper. The cast-in features on the door identify the machine as an SCM Model T120 L'Invincibile shaper. Photo #3 shows the upper left front corner of the machine. The red label further identifies the machine as SCM-Rimini, Made in Italy. The small metal plate below this red label and the handwritten numbers both identify this machine as Meridian Products' asset number 1025. Also shown in Photo #3 is an automatic brake and ON/OFF control that has been added to the shaper after its original sale and before this incident. This gray control box can also be seen at the left side of the machine in Photo #1. Photo #4 shows a close-up of the brake control box. The brake is a Short-Stop, Type "G", electronic motor brake manufactured by Ambitech Industries, Inc., Hillsdale, NJ. The Short Stop motor brake instruction manual provided by Meridian Products has a 1989 copyright date.

Photo #5 shows a close-up view of the newly-added front ON/OFF control. Immediately to the right of this control one can see the spindle elevation crank control. And, to the right of the elevation control is seen the original electrical control box for the shaper. Photo #6 shows a closer view of the front of this original electrical control box. Also seen are where the original buttons for starting, stopping, and braking were located.

Shown in Photos #7 and #8 are disc and cylinder cutter guards as mentioned above. Neither of these guards was on the shaper at the time of Mr. Rosario's incident.

A second inspection was performed on February 10, 2003 with the singular purpose of trying to find an SCM serial number identification on the machine. None was found during my two inspections. There are various numbers stamped into a metal plate on the side of the motor control box seen in Photo #6, but none appears to be the machine serial number.

The subject shaper sits on a concrete floor at Meridian Products. The table top is 35 1/2". above the floor and measures 41" wide and 80" deep. The cutter spindle protrudes through the table top, is centered right to left, and is 16" back from the front of the table top. A wooden storage shelf has been added to the rear of the table top. This shelf is 11 1/4" high, 24" deep, and straddles the width of the table top. The front of the shelf is 18 7/8" behind the front edge of the table top.

The Short-Stop electronic motor brake control box is located on the left side of the machine, as stated earlier. The OFF button on this control is 12" below the table top and 15" to the rear of the front of the table top. This is the OFF button that Mr. Rosario was reaching for at the time of this incident.

Based on the machine labeling and cast-in wording I identified the subject machine as a Model T120, L'Invincibile, shaper manufactured by SCM, Rimini, Italy.

F. ANALYSIS

Improper location for ON/OFF control

As originally manufactured, the subject shaper had its ON/OFF control located on the right rear side of the machine. In this location, the operator either had to walk around the right side of the shaper to turn it ON or OFF, or he had to reach around the right side with his right hand while standing in the customary operator-front position. Each of these actions places the operator at risk, especially if an emergency is involved. If the operator walks around to the side of the machine, he must divert his attention away from whatever is happening on the table top while he searches for the proper control. If he reaches around to the side of the machine from the front position, he must place his left hand on the table top to support his upper body. In this way, while the operator is searching for the proper control button with his right hand, his left hand is on the table top and not being considered by the operator. Thus, if the operator's hand slips, or his body slips as in this matter, the hand on the table top can find its way to the high speed rotating cutters.

This is precisely what happened to Mr. Rosario, only because the ON/OFF control was on the left side of the shaper, his right hand was cut instead of his left hand. At some time after the manufacture of the subject shaper, a new ON/OFF control and automatic brake were added to the left side of the machine and the right side control was deactivated. In fact, the new left side controls are closer to the operator than the original right side controls, but not close enough to make a difference in this matter.

The fact that the placement of the ON/OFF control and brake was moved to the left side of the shaper has no bearing on this matter. Whoever made this alteration took their cue from SCM and continued a side-mount orientation for the controls. It is reasonable to assume that the subsequent modifier was no expert in shaper design and used the original SCM placement as the model for the modification.

The ON/OFF control for this shaper should have been placed in a prominent front-mounted position so that, whether during normal operations or in an emergency, the operator could safely reach the proper control.

SCM should have foreseen that their placement of the ON/OFF control on the side of the machine would subject operators to hazardous placement of their body and body parts. SCM's placement of the ON/OFF control on the side of the shaper made the design of the T120 shaper defective, unreasonably dangerous, unsafe for its intended use, and a cause of Mr. Rosario's injury.

Lack of proper guarding

"The cutting heads of each wood shaper, hand-fed panel raiser, or other similar machine not automatically fed, shall be enclosed with a cage or adjustable guard so designed as to keep the operator's hands away from the cutting edge. The diameter of circular shaper guards shall not be less than the greatest diameter of the cutter." This standard is the forerunner of the current American National Standards Institute, ANSI O1.1 Safety Requirements for Woodworking Machinery. SCM's CEO is currently on the ANSI Board. (Sitz, P. 69)

There is no testimony that the guarding requirements of ASA O1.1 or ANSI O1.1 were met by the subject shaper as-manufactured. There are no instructions on the subject shaper regarding the proper use of such guarding. Disc and cylindrical overhead guards were fabricated at local machine shops to the order of Meridian Products for the subject shaper. The cylindrical guard was fabricated after Mr. Rosario was injured. No overhead guarding was in use at the time of this incident. (Howe, Pgs. 87 & 90)

The wood that Mr. Rosario had been shaping was 21/32" thick. (Howe, P. 91) If an overhead cutter guard had been used and set to just clear the top of the wood, the resultant gap would have prevented entry of Mr. Rosario's finger, or would have at least minimized the extent of his injury.

¹ American Standards Association, ASA O1.1-1954, American Standard Safety Code for Woodworking Machinery, Section 4.6.1, in part.

Without proper overhead cutter guarding, the design of the subject SCM T120 shaper is defective, unreasonably dangerous, unsafe for its intended use, and was a cause of Mr. Rosario's injury.

Lack of proper warnings

There are no warning labels on the subject shaper. There are no warnings about the need for using an overhead cutter guard while doing freehand operations, as Mr. Rosario was doing. SCM did not provide an operator's manual for the subject T120 shaper for this investigation. SCM did provide a manual for a T120c shaper; a different, newer version of the older T120. These instructions for the T120c inform the user (on page 18) that "in profiling operations ... protective transparent plastic discs are used whose diameters are at least 40 mm greater than that of the tool". However, there are no instructions about how these plastic discs are to be set up and used.

A warning label(s) should have been provided by SCM stating, "Never use this shaper without the use of a proper guard. Serious injury could occur. See Operator's Manual for proper selection and use.", or similar wording. Such a label should have been placed in all appropriate places in the operator's manual, on the front of the shaper, and in a small recess in the table top.

SCM also did not provide instructions to the user about using caution while reaching for the side-mounted ON/OFF control. SCM should have foreseen that operator's would rest their free hand on the table top while reaching for the side-mounted ON/OFF control. Absent any obstruction on the table top, an operator's hand can slip and enter the path of the high speed cutters.

Without these proper warnings, SCM deprived Mr. Rosario, and those training him, of information he needed to safely use the subject shaper. Without proper warnings about the selection and use of proper guarding for profiling work and the exercise of caution while operating the controls, the design of the subject SCM T120 shaper is defective, unreasonably dangerous, unsafe for its intended use, and a cause of Mr. Rosario's injury.

Reducing Exposure to Injury 2

"The basic measures for preventing accidental injury, in order of effectiveness and preferences are:

- 1. Eliminate the hazard from the machine, method, material, or plant structure.
- 2. Control the hazard by enclosing or guarding it at its source.
- 3. Train personnel to be aware of the hazard and to follow safe job procedures to avoid it.
- 4. Prescribe personal protective equipment to shield them against the hazard.

SCM failed to eliminate these hazards, SCM failed to guard against these hazards, and SCM failed to instruct users about these hazards.

² Accident Prevention Manual for Industrial Operations, 5th Edition, National Safety Council, 1964.

G. FINDINGS

Within a reasonable degree of engineering certainty, and subject to change if additional information becomes available, it is my opinion that:

- 1. Mr. Leonides Rosario was injured while using an SCM T120 shaper in a reasonable manner foreseeable to SCM.
- 2. SCM failed to provide ON/OFF controls in a safe and accessible position on the subject T120 shaper. This failure made the subject shaper defective, unreasonably dangerous, unsafe for its intended use, and a cause of Mr. Rosario's injury.
- 3. SCM failed to provide proper overhead guarding for the exposed cutters of the subject T120 shaper. This failure made the subject shaper defective, unreasonably dangerous, unsafe for its intended use, and a cause of Mr. Rosario's injury.
- 4. SCM failed to provide proper warnings regarding the selection and use of proper guarding and the exercise of caution while operating controls for the subject T120 shaper. This failure made the subject shaper defective, unreasonably dangerous, unsafe for its intended use, and a cause of Mr. Rosario's injury.

Richard A. Calkey Richard A. Colberg

Mechanical Engineer

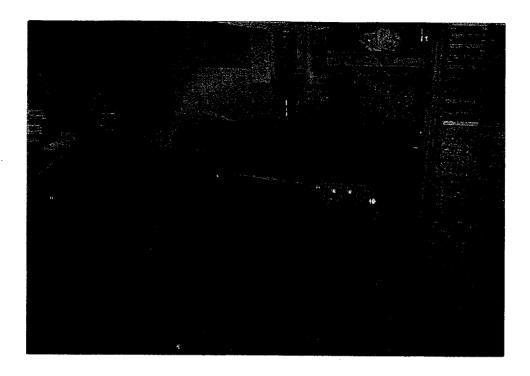


PHOTO #1



PHOTO #2

- Robson Lapina



PHOTO #3

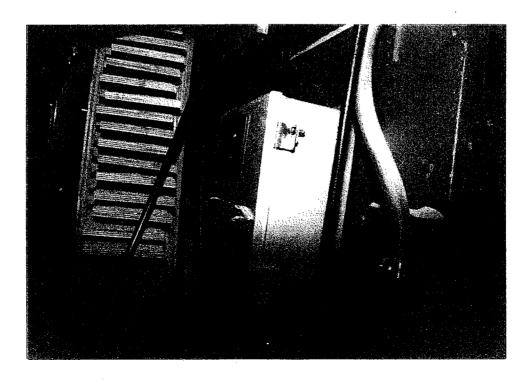
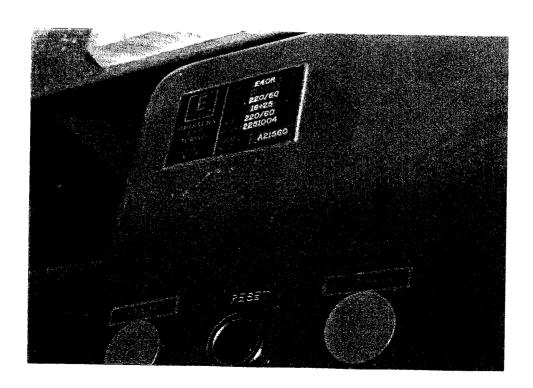


PHOTO #4



PHOTO #5



РНОТО #6

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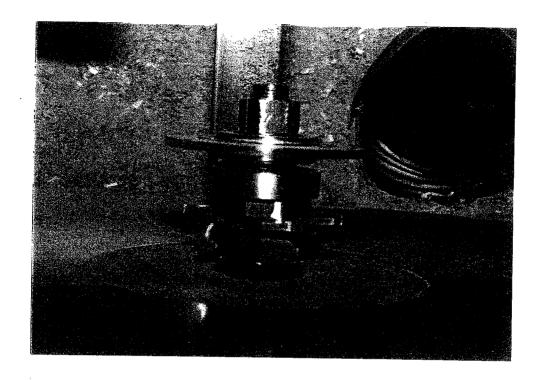


PHOTO #7

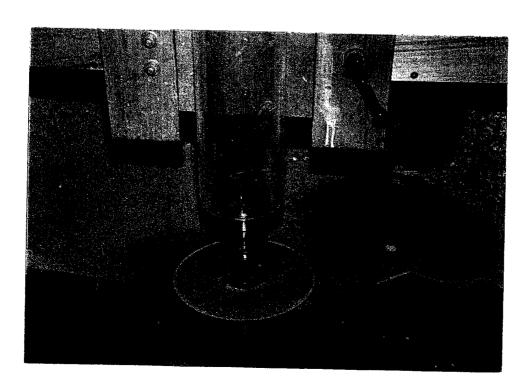


PHOTO #8

- **Robson Lapin**a